

| | | | | | | | | | | |
|--|----------------|----------------------|---|----------------------------|--|--|--|---------|-------------------------|------------------|
| EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment | | | | | | Work Assignment Number 1-11 | | | | |
| | | | | | | <input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001 | | | | |
| Contract Number EP-D-14-032 | | | Contract Period 09/16/2014 To 09/15/2015 Base Option Period Number 1 | | | Title of Work Assignment/SF Site Name Enhancing BenMAP-CE Pooling... | | | | |
| Contractor INDUSTRIAL ECONOMICS, INCORPORATED | | | | | Specify Section and paragraph of Contract SOW 1, 10, 12, 14 | | | | | |
| Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval | | | | | | Period of Performance From 09/16/2015 To 09/15/2019 | | | | |
| Comments: SOW AMENDED TO ADD TASK 4 (SEE ATTACHED). CONTRACTOR SHALL REVISE WORK PLAN/COST ESTIMATE TO REFLECT THIS CHANGE. AN ADDITIONAL 100 HOURS IS INCLUDED FOR REVISING WP/COST ESTIMATE AND CONTINUING WORK ON THE WORK ASSIGNMENT. NO PREVIOUSLY PERFORMED WORK SHALL BE DUPLICATED. | | | | | | | | | | |
| <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund | | | | | | | | | | |
| SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A. | | | | | | | | | | |
| Line | DCN (Max 6) | Budget/FY (Max 4) | Appropriation Code (Max 6) | Budget Org/Code (Max 7) | Program Element (Max 9) | Object Class (Max 4) | Amount (Dollars) | (Cents) | Site/Project (Max 8) | Cost Org/Code |
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| Authorized Work Assignment Ceiling | | | | | | | | | | |
| Contract Period: Cost/Fee: LOE: 09/16/2014 To 09/15/2015 | | | | | | | | | | |
| This Action: | | | | | | | | | | |
| Total: | | | | | | | | | | |
| Work Plan / Cost Estimate Approvals | | | | | | | | | | |
| Contractor WP Dated: Cost/Fee LOE: | | | | | | | | | | |
| Cumulative Approved: Cost/Fee LOE: | | | | | | | | | | |
| Work Assignment Manager Name Neal Fann <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div> | | | | | | | Branch/Mail Code: Phone Number: 919-541-0209 FAX Number: | | | |
| Project Officer Name Carolyn Blake <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div> | | | | | | | Branch/Mail Code: Phone Number: 919-541-5256 FAX Number: | | | |
| Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div> | | | | | | | Branch/Mail Code: Phone Number: FAX Number: | | | |
| Contracting Official Name Natalia Fisher-Jackson <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div> | | | | | | | Branch/Mail Code: Phone Number: 919-541-3564 FAX Number: | | | |

**Amendment to SOW
IEc EP-D-14-032 – WA 1-11**

Note: Extend date of performance on WA to 9/15/2016 in lieu of 9/14/2016.

TITLE: Enhancing the BenMAP-CE Pooling Features and Gathering International Data for the PopSim Tool

Task #4: Test the Sensitivity of Estimated Human Health Impacts to Alternative Scenarios

The Contractor shall perform a suite of sensitivity analyses to characterize the influence of several key input variables and assumptions. Using the batch mode tool and the newly developed multi-pollutant version of the BenMAP-CE tool, and EPA-provided input data, the Contractor shall assess the following scenarios:

- Representative Concentration Pathways (RCP) 4.5, 6 and 8.5
-
- Dynamically downscaled climate models including GISS and CESM
- 36km and 12km grid scales
- Integrated Climate and Land Use Scenario (ICLUS) projected population counts for alternate Special Report on Emission Scenarios (SRES)

The Contractor shall quantify PM and ozone-related premature deaths as well as temperature-modified ozone deaths. When performing each sensitivity analysis, the Contractor shall run the BenMAP-CE tool by modifying one input variable at a time.

Deliverables:

4.1 List of scenarios to be run in BenMAP-CE

4.2 Tabular summary of results and BenMAP-CE *.ctx scripting files

Delivery Schedule: NLT 9/15/2016